



## Maine EMS 2023 Protocol Update Summary Change Reference

This document is intended to act as a quick reference to the major changes occurring in the Maine EMS 2023 Protocol update. This document should act only as a reference and is not intended to supplant attendance at a Maine EMS Protocol Update and review of the Maine EMS 2023 Protocols, which can be found on the Maine EMS website (<http://maine.gov//dps/ems/>) under the “Publications and Forms” section.

For questions regarding these changes, please refer to your Maine EMS Regional Medical Director, the Maine EMS Medical Director/Associate Medical Director, or another member of the Maine EMS Medical Direction and Practices Board (MDPB). Thank you for reviewing this information.

### **Brown Section/Foreword**

There were limited changes to the Brown Section in the 2023 Protocol Updates. The electronic run report completion requirement is highlighted by referring EMS clinicians to Maine EMS Rules and Regulations. Transport to Regional Destination facilities is highlighted to include all systems of care supporting the management of time critical illnesses and injuries including, ACS/STEMI and Stroke patients.

### **Purple Section/Definitions**

The Purple Section review highlighted additional definitions, including cerebral perfusion and mean arterial pressure definitions to clarify treatment goals in the Head Trauma and Medical Shock Protocols, respectively. A definition of Pulse Pressure was added to define an early sign of hypotension in the new Trauma Triage Protocol. A definition of **Fever** is also included to support the new Fever Protocol. Definitions of Service Medical Directors and Maine Operational Physicians are also included.

### **Blue Section/Respiratory**

The Blue Section review has removed the reference to C-collar utilization for ETT stabilization. Routine bougie utilization has been removed from the Pre-intubation checklist and Airway Algorithms in favor of a strong recommendation for the use of Bougies. The Respiratory Distress with Bronchospasm Protocol has been reorganized to prioritize IM epinephrine at the EMT/AEMT scope of practice over CPAP. Additionally, the Bronchospasm Protocol now includes: 1) the starting and maximum settings for CPAP of 5 and 10 cm H<sub>2</sub>O, respectively, 2) a maximum dose of 16 mg for Dexamethasone, and 3) a change in the rate of infusion for IV magnesium.

### **Red Section/Cardiac**

In the Cardiac Arrest Protocol, the MDPB created an option for administration of IV epinephrine at the AEMT scope of practice, if so trained and equipped. This is not intended to deemphasize the importance of foundational steps, including high performance chest compressions and early defibrillation. New Pediatric Cardiac Arrest and Pediatric Post Resuscitation Care Protocols have been added to provide pediatric specific recommendations during and after cardiac arrest. Updates have been made to the Adult Cardiac arrest Protocol including emphasis on Dual Sequential External Defibrillation/Vector Changes for refractory pulseless VT/VF. The Adult Post Resuscitation Care Protocol has been updated to include the mnemonic “SAVE A LIFE” as a reminder of the essential steps to stabilize a patient after ROSC. The OLMC requirement for norepinephrine has been removed in the Post Resuscitation Care Protocol (adding consistency throughout the Protocols) and highlighting the importance of adequate BP to restore perfusion in these scenarios. The Bradycardia Protocol (Pearl) emphasizes the recommendation of AP pad placement during pacing.

# Maine EMS 2023 Protocol Update Summary Change Reference



## **Gold Section/General Medical**

The Gold section review in the 2023 Protocols changed the frequency of IM administration of epinephrine to every 5 minutes for Anaphylaxis and moved bronchodilator administration to the EMT level (based on the 2021 EMT scope of practice updates). The Allergy and Anaphylaxis protocol also emphasizes early consultation with OLMC for patients suffering anaphylaxis. The Diabetic/Hypoglycemic Protocol now includes doses of glucose for pediatric patients. The Seizure Protocol highlights the treatment of seizures in pregnancy and in the up to 6 weeks post-partum period emphasizing Magnesium administration as the first treatment for seizures in eclampsia. The IO route of medication administration has been added to the Seizure protocol for pediatric patients. The Stroke Protocol adds language to prompt recognition of posterior circulation strokes. This protocol change also emphasizes determination of last known well time (LKW) and communication with hospital staff regarding thrombolytic checklist findings. Finally, the Stroke Protocol now refers to “thrombolytics” vs. “TPA” as additional thrombolytic drugs are now being used to treat stroke. The Medical Shock Protocol emphasizes recognition of hypotension in Adult and Pediatric patients. The maximum dose of Dexamethasone has been changed to 16 mg in Adrenal Insufficiency which maintains consistency across the protocols. The Nausea/Vomiting Protocol now includes IM ondansetron administration for adults and pediatric patients. Doses of NOREPinephrine have been updated. Finally, the Gold 2023 Protocols include a new Fever Protocol.

## **Green Section/Trauma**

The Green section review has updated the Trauma Triage Protocol based on recent changes to the National Prehospital Trauma Triage Guidelines from the American College of Surgeons and the National Highway Traffic Safety Administration’s Office of EMS. This change uses Injury Patterns, Vital Signs, Mechanism and EMS Clinician Judgement to identify patients with high and moderate risk of serious injury. The Spine Assessment and Management Protocol includes a newly developed algorithm that highlights C-spine immobilization decisions. The Chest Trauma Protocol further clarifies recognition and treatment of Tension PTX. The Head Trauma Protocol highlights the importance of ETCO2 monitoring and management goals in all TBI patients and includes airway adjuncts which may be utilized in this population. The Hemorrhage Protocol emphasizes the importance of pelvic stabilization in trauma patients experiencing shock. This Protocol also highlights BP goals in the hemorrhagic shock patient. The Burn Protocol refers EMS clinicians to the Trauma Triage Protocol when determining Regional Destination. The Universal Pain Management Protocol makes note of patients with substance use disorder (SUD) to aid EMS clinicians in most appropriate pain management decision-making. The Termination of Resuscitation Protocol highlights inclusion/exclusion criteria and refers the EMS clinician to appropriate treatments for the trauma patient suffering cardiac arrest. Additional management guidance has been added to the Facial/Dental Injury Protocol for epistaxis and nose/ear trauma. The Ophthalmology Protocol has been updated to include additional assessment and management steps. Finally, a new Strangulation Protocol has been added that includes recognition

## **Yellow Section/Toxicologic and Environmental**

Yellow section review includes removal of Activated Charcoal for the treatment of overdose secondary to ingestions. Charcoal is rarely utilized in the pre-hospital setting and is no longer routinely recommended for ingestions. The dosing of norepinephrine for TCA overdoses has been updated to allow for higher starting doses with titration for effect. The Naloxone Dispensation Protocol is now mandatory and includes patient education regarding available services. The Radiation Injuries Protocol has been updated to include anti-emetics (ondansetron) at the AEMT scope of practice. The Hypothermia Protocol is now divided into Hypothermia with or without signs of life and includes hospital-grade electric forced-air warmers, if available. Doses of NOREPinephrine have been updated.

# Maine EMS 2023 Protocol Update

## Summary Change Reference



### **Pink Section/Pediatric**

The Pink section review introduces Oxytocin for the prevention of post-partum hemorrhage in the Childbirth section. The Childbirth Protocol also emphasizes the importance of maintaining warmth of the newborn. Also included in this protocol is the technique to maintain the baby's airway in a breech birth. In the Neonatal Resuscitation Protocol, the dose of epinephrine has been updated for consistency with NRP recommendations.

### **Orange Section/Behavioral Emergencies**

The Orange section review highlights the importance of considering a non-psychiatric etiology of altered mental status in the Transport of Mentally Ill Patients Protocol and refers the EMS clinician to the Altered Level of Consciousness Protocol (Gold section). This protocol also refers the clinician to the Grey section Transport Protocol under the "Voluntary Committal" section. A Pearl has been added addressing the increased frequency of Pediatric Behavioral Emergencies and the importance of EMS clinicians establishing rapport when interacting with pediatric patients. Doses for midazolam and ketamine have been added for patients 10 years and older in the Delirium with Agitated Behavior Protocol. The Depression/Suicidal Ideation Protocol emphasizes treatment steps and the potential of ALS providers in patients suffering injury/ingestion. In addition, the protocol adds reminders to make note of potential substances at the scene and references the Overdose/Poisoning Protocol (Yellow section). The Agitation/Excited Delirium Protocol has been re-named "Hyperactive Delirium with Severe Agitation" per current accepted medical terminology. The Restraint protocol adds reference to pharmacologic intervention for patients who are physically restrained.

### **Grey Section/Operations**

Grey section additions include the Landing Zone Protocol (previously in the Green section) with updated language for safety. New Protocols in this section include a Baby Safe Haven and a Transport Safety Protocol geared at protecting EMS clinicians, patients, and others on the roadways. The Death Situations for Emergency Responders Protocol now mandates referral to NEDS for deceased patients meeting potential organ/tissue donor criteria. The DNR Guidelines have been updated to acknowledge the authority of a Durable Power of Attorney. Activated Charcoal has been removed for the Maine EMS Medication list for consistency with the Overdose/Poisoning Protocol. The Telephone/Radio/Contact Numbers pages have been updated with current information